

**R e m a r k s**

Claims 1-7 are pending are pending in the application; claims 8-32 are canceled.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matturi et al. (US Patent 6,574,208, hereinafter "Matturi") in view of Patel (US Patent 7,031,266, hereinafter "Patel") and further in view of Reynolds et al. (US 2002/0196763, hereinafter "Reynolds").

Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matturi in view of Patel further in view of Reynolds in further view of Barber et al. (US Patent Application Publication 2004/0078598, hereinafter "Barber").

Each of the various rejections and objections are overcome by amendments that are made to the specification, drawing, and/or claims, as well as, or in the alternative, by various arguments that are presented.

Any amendments to any claim for reasons other than as expressly recited herein as being for the purpose of distinguishing such claim from known prior art are not being made with an intent to change in any way the literal scope of such claims or the range of equivalents for such claims. They are being made simply to present language that is better in conformance with the form requirements of Title 35 of the United States Code or is simply clearer and easier to understand than the originally presented language. Any amendments to any claim expressly made in order to distinguish such claim from known prior art are being made only with an intent to change the literal scope of such claim in the most minimal way, i.e., to just avoid the prior art in a way that leaves the claim novel and not obvious in view of the cited prior art, and no equivalent of any subject matter remaining in the claim is intended to be surrendered.

Also, since a dependent claim inherently includes the recitations of the claim or chain of claims from which it depends, it is submitted that the scope and content of any dependent claims that have been herein rewritten in independent form is exactly the same as the scope and content of those claims prior to having been rewritten in independent form. That is, although by convention such rewritten claims are labeled herein as having been "amended," it is submitted that only the format, and not the content, of these claims has been changed. This is true whether a dependent claim has been rewritten to expressly

include the limitations of those claims on which it formerly depended or whether an independent claim has been rewritten to include the limitations of claims that previously depended from it. Thus, by such rewriting no equivalent of any subject matter of the original dependent claim is intended to be surrendered. If the Examiner is of a different view, he is respectfully requested to so indicate.

**Claim Amendments**

Applicants have herein amended the claims to change wireless local area network (WLAN) to wireless area network (WAN). Applicants note that Applicants' originally-filed specification includes support for embodiments using multiple different kinds of wireless area networks, including but not limited to wireless local area networks (WLAN), wireless personal area networks (WPANs), and the like. Applicants submit that no new matter has been entered. Applicants further submit that Applicants' previous arguments with respect to WLANs are applicable to WANs and, thus, that Applicants' previous arguments overcome previous rejections of Applicants' claims under 35 U.S.C. in view of Matturi in view of Patel.

**Rejection Under 35 U.S.C. 103(a)**

The Examiner bears the initial burden of establishing a prima facie case of obviousness. See MPEP §2141. Establishing a prima facie case of obviousness begins with first resolving the factual inquiries of *Graham v. John Deere Co.* 383 U.S. 1 (1966). The factual inquiries are as follows:

- (A) determining the scope and content of the prior art;
- (B) ascertaining the differences between the claimed invention and the prior art;
- (C) resolving the level of ordinary skill in the art; and
- (D) considering any objective indicia of nonobviousness.

Once the Graham factual inquiries are resolved, the Examiner must determine whether the claimed invention would have been obvious to one of ordinary skill in the art. The key to supporting a rejection under 35 U.S.C. §103 is the clear articulation of the reasons why the claimed invention would have been obvious. The analysis supporting such a rejection must be explicit. "[R]ejections on obviousness grounds cannot be

sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F. 3d 977, 988 (CA Fed. 2006), cited with approval in *KSR Int'l Co. v. Teleflex, Inc.*, 126 S. Ct. 2965 (2006); see also MPEP §2141.

According to MPEP §2143.03: "All words in a claim must be considered in judging the patentability of that claim against the prior art" (*quoting, In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)). In addition, to establish a prima facie case of obviousness the prior art reference (or references when combined) must teach or suggest all elements of the subject claim. *In re Wada*, 2007-3733 (BPAI Jan. 14, 2008) (*citing, CMFT, Inc. v. Yieldup Intern. Corp.*, 349 F.3d 1333, 1342 (Fed.Cir. 2003)).

### Claims 1-5

#### Claims 1 – 2

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matturi in view of Patel in further view of Reynolds. The rejection is traversed.

Matturi, Patel, and Reynolds, alone or in combination, fail to teach or suggest at least the limitation of "receiving at said WAN gateway, from at least one wireless access point receiving said discovery message, an access point registration request comprising access point location, IP address, MAC address, radio type, and power level information of said wireless access point," as claimed in Applicants' claim 1.

Matturi fails to teach or suggest at least the limitation of "receiving at said WAN gateway, from at least one wireless access point receiving said discovery message, an access point registration request comprising access point location, IP address, MAC address, radio type, and power level information of said wireless access point," as claimed in Applicants' claim 1.

Applicants submit that Matturi is directed toward establishing connections between base station controllers and base stations in a cellular system. Matturi is devoid of any teaching or suggestion of a wireless area network (WAN) and, thus, fails to teach or suggest the wireless access points or WAN gateway of Applicants' claim 1.

Applicants further submit that, even assuming arguendo that the cellular network teachings of Matturi could be applied in a rejection of Applicants' claims (which Applicants maintain they cannot), Matturi merely discloses that a base station controller transmits a request message to the base station. By contrast, Applicants' claim 1 includes the feature that a gateway receives a request message from at least one access point where the request message includes registration request information. Thus, Matturi would still fail to teach or suggest receiving at a WAN gateway, from at least one wireless access point receiving a discovery message, an access point registration request including access point registration information, as claimed in Applicants' claim 1.

Furthermore, Applicants note that Matturi is devoid of any teaching or suggestion of any of the specific parameters included in the access point registration request of Applicants' claim 1 (namely, access point location, IP address, MAC address, radio type, and power level information of the wireless access point). Rather, Matturi merely includes a general statement indicating that response message from the base station includes identification information of the base station. Thus, identification information of a base station, as disclosed in Matturi, does not teach or suggest access point location, IP address, MAC address, radio type, and power level information of a wireless access point in a WAN network, as claimed in Applicants' claim 1.

Thus, at least for these reasons, Matturi fails to teach or suggest at least the limitation of "receiving at said WAN gateway, from at least one wireless access point receiving said discovery message, an access point registration request comprising access point location, IP address, MAC address, radio type, and power level information of said wireless access point," as claimed in Applicants' claim 1.

Furthermore, Patel and Reynolds fail to bridge the substantial gap between Matturi and Applicants' claim 1.

Patel fails to teach or suggest at least the limitation of "receiving at said WAN gateway, from at least one wireless access point receiving said discovery message, an access point registration request comprising access point location, IP address, MAC address, radio type, and power level information of said wireless access point," as claimed in Applicants' claim 1.

Rather, Patel merely discloses that a wireless router exchanges configuration with neighboring wireless routers, not a gateway. The exchange of configuration information between wireless routers such that one wireless router receives configuration information from neighboring wireless routers, as disclosed in Patel, does not teach or suggest that a gateway receives an access point registration request from a wireless access node, as claimed in Applicants' claim 1. Rather, at most, Patel discloses that configuration information is exchanged between access points, not between an access point and a gateway.

Thus, at least for these reasons, Patel fails to teach or suggest at least the limitation of "receiving at said WAN gateway, from at least one wireless access point receiving said discovery message, an access point registration request comprising access point location, IP address, MAC address, radio type, and power level information of said wireless access point," as claimed in Applicants' claim 1.

Furthermore, Reynolds fails to bridge the substantial gap between Matturi and Patel and Applicants' claim 1.

Reynolds fails to teach or suggest at least the limitation of "receiving at said WAN gateway, from at least one wireless access point receiving said discovery message, an access point registration request comprising access point location, IP address, MAC address, radio type, and power level information of said wireless access point," as claimed in Applicants' claim 1.

Applicants note that Reynolds discloses a system in which an access point receiving a response message from a master wireless communication server sends a registration request to a master wireless communication device. More specifically, Reynolds states that "[i]n step 1, the access point sends a request looking for the master wireless communication server onto the wireless LAN. In step 2, the master wireless communication server responds to the access point. In step 3, the access point sends a registration request to the master wireless communication server." (Reynolds, Para. 0014, Emphasis added). In other words, in Reynolds the access point sends a discovery request message (step 1), the server responds to the discovery request message (step 2), and the access point sends a registration request to the server (step 3). Thus, Reynolds discloses that an access point receiving a discovery response message sends a registration request.

By contrast, in Applicants' claim 1, a gateway receives an access point registration request from an access point receiving a discovery message.

Thus, at least for these reasons, Reynolds fails to teach or suggest at least the limitation of "receiving at said WAN gateway, from at least one wireless access point receiving said discovery message, an access point registration request comprising access point location, IP address, MAC address, radio type, and power level information of said wireless access point," as claimed in Applicants' claim 1.

Thus, since each of Matturi, Patel, and Reynolds fails to teach or suggest the limitation of "receiving at said WAN gateway, from at least one wireless access point receiving said discovery message, an access point registration request comprising access point location, IP address, MAC address, radio type, and power level information of said wireless access point," a combination of Matturi, Patel, and Reynolds (assuming such combination is even possible) also fails to teach or suggest the limitation of "receiving at said WAN gateway, from at least one wireless access point receiving said discovery message, an access point registration request comprising access point location, IP address, MAC address, radio type, and power level information of said wireless access point," as claimed in Applicants' claim 1.

Moreover, as admitted by the Examiner, both Matturi and Patel fail to teach or suggest an access point registration request comprising a MAC address. In the Office Action, the Examiner takes Official Notice with respect to the MAC address limitation, asserting that "...while the use of a MAC address is not specifically noted, it is well known in the art of wireless networking to utilize a MAC address as a unique identifier." (Office Action, Pg. 4). Applicants respectfully disagree.

MPEP 2144.03 states that "[i]t would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known" and, further, that "[i]f applicant adequately traverses the examiner's assertion of official notice, the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained."

Applicants note that MAC addresses are not necessarily used in all types of wireless networks. For example, MAC addresses typically are not used in cellular

networks, such as the network of Matturi. Additionally, it is not clear that MAC addresses necessarily would be used in the network of Patel. Thus, since MAC addresses are not used in all types of wireless networks, the Examiner's reliance, via Official Notice, on the use of MAC addresses in wireless networks is improper. Accordingly, the Examiner must provide documentary evidence in the next Office action if the rejection is to be maintained.

Additionally, Applicants further note that Matturi and Patel each fail to teach or suggest an access point registration request comprising an IP address or a radio type. As described hereinabove, Matturi merely states that a response message from the base station includes identification information of the base station, failing to teach or suggest any of the specific parameters included in the access point registration request of Applicants' claim 1. Furthermore, Applicants note that the parameters described in Patel (which are listed in Figure 3 of Patel) fail to include IP address or radio type. Applicants respectfully request that the Examiner point out exactly where in Patel there is any teaching or suggestion of an access point registration request including an IP address or a radio type.

Furthermore, Applicants note that Reynolds is devoid of any teaching or suggestion of any such parameters. Rather, Reynolds merely states that the access point sends a registration request to the master wireless communication server. Reynolds is devoid of any teaching or suggestion that a registration request includes registration request information as claimed in Applicants' claim 1. More specifically, Reynolds is devoid of any teaching or suggestion that a registration request includes access point location, IP address, MAC address, radio type, and power level information of a wireless access point, as claimed in Applicants' claim 1.

Thus, a combination of Matturi, Patel, and Reynolds fails to teach or suggest "an access point registration request comprising access point location, IP address, MAC address, radio type, and power level information of said wireless access point," as claimed in Applicants' claim 1.

Thus, for at least these reasons, Matturi, Patel and Reynolds, alone or in combination, fail to teach or suggest Applicants' claim 1, as a whole.

The Office Action failed to establish a *prima facie* case of obviousness, because the combination of Matturi, Patel and Reynolds fails to teach or suggest all the claim elements.

As such, independent claim 1 is patentable over Matturi in view of Patel further in view of Reynolds under 35 U.S.C. 103(a). Furthermore, claim 2 depends from independent claim 1, while adding additional elements. Therefore, this dependent claim also is non-obvious and is patentable over Matturi in view of Patel further in view of Reynolds under 35 U.S.C. §103 for at least the same reasons discussed above in regards to independent claim 1.

As such, Applicants' claims 1-2 are patentable over Matturi in view of Patel further in view of Reynolds under 35 U.S.C. §103(a). Therefore, the rejection should be withdrawn.

### **Claims 3 - 5**

Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matturi in view of Patel in further view of Reynolds. The rejection is traversed.

Matturi, Patel, and Reynolds, alone or in combination, fail to teach or suggest at least the limitation of "selecting, by said wireless access point, an appropriate WAN gateway in an instance where more than one service discovery message is received," as claimed in Applicants' claim 3.

Matturi fails to teach or suggest at least the limitation of "selecting, by said wireless access point, an appropriate WAN gateway in an instance where more than one service discovery message is received," as claimed in Applicants' claim 3.

Applicants submit that Matturi is directed toward establishing connections between base station controllers and base stations in a cellular system. Matturi is devoid of any teaching or suggestion of a wireless area network (WAN) and, thus, fails to teach or suggest the wireless access points or WAN gateway of Applicants' claim 3.

Applicants further submit that, even assuming arguendo that the cellular network teachings of Matturi could be applied in a rejection of Applicants' claims (which Applicants maintain they cannot), Matturi merely discloses that: (1) when a base station controller detects that it has been provided with identification information of a base

station not yet connected to the base station, the base station controller transmits a link protocol link establishment request message, and (2) when the new base station connected to the system receives the link protocol link establishment request message, if no other base station replies to the message, the base station transmits an acknowledgment message to the base station controller. (Matturi, Col. 7, Lines 1 – 30). In other words, in the system of Matturi the base station only ever communicates with a single base station controller for purposes of establishing a connection with the base station controller. Matturi is devoid of any teaching or suggestion of multiple BCSs with which a base station may associate. Thus, Matturi is devoid of any teaching or suggestion that a base station selects an appropriate base station controller and, therefore, fails to teach or suggest selecting an appropriate WAN gateway in an instance where more than one service discovery message is received as claimed in Applicants' claim 3.

In the Office Action, the Examiner cites specific portions of Matturi (namely, Col. 5, Lines 9 – 17, Col. 7, Lines 21 - 48), asserting that the cited portions of Matturi disclose Applicants' limitation of "selecting, by said wireless access point, an appropriate WAN gateway in an instance where more than one service discovery message is received," as claimed in Applicants' claim 3. Applicants respectfully disagree.

With respect to the first portion of Matturi cited by the Examiner, Applicants note that the cited portion of Matturi merely states that when a base station controller detects that it has been provided with identification information on base stations not yet connected to the base station controller, the base station controller transmits frames used for communication with the base stations. This portion of Matturi is devoid of any teaching or suggestion of selecting an appropriate WAN gateway in an instance where more than one service discovery message is received as claimed in Applicants' claim 3.

With respect to the second portion of Matturi cited by the Examiner, Applicants submit that, as noted hereinabove, the cited portion of Matturi merely describes a process by which a connection between a base station controller and a base station is established. As described hereinabove, in the system of Matturi the base station only ever communicates with a single base station controller for purposes of establishing a connection with the base station controller. Matturi is devoid of any teaching or suggestion of multiple BCSs with which a base station may associate. Thus, Matturi is

devoid of any teaching or suggestion that a base station selects an appropriate base station controller and, therefore, fails to teach or suggest selecting an appropriate WAN gateway in an instance where more than one service discovery message is received as claimed in Applicants' claim 3.

Thus, at least for these reasons, Matturi fails to teach or suggest at least the limitation of "selecting, by said wireless access point, an appropriate WAN gateway in an instance where more than one service discovery message is received," as claimed in Applicants' claim 3.

Furthermore, Patel and Reynolds fail to bridge the substantial gap between Matturi and Applicants' claim 3.

Patel fails to teach or suggest at least the limitation of "selecting, by said wireless access point, an appropriate WAN gateway in an instance where more than one service discovery message is received," as claimed in Applicants' claim 3.

Rather, Patel merely discloses that a wireless router exchanges configuration with neighboring wireless routers, not a gateway. Patel is devoid of any teaching or suggestion of selecting an appropriate WAN gateway in an instance where more than one service discovery message is received.

Thus, Patel fails to teach or suggest at least the limitation of "selecting, by said wireless access point, an appropriate WAN gateway in an instance where more than one service discovery message is received," as claimed in Applicants' claim 3

Furthermore, Reynolds fails to bridge the substantial gap between Matturi and Patel and Applicants' claim 3.

Reynolds fails to teach or suggest at least the limitation of "selecting, by said wireless access point, an appropriate WAN gateway in an instance where more than one service discovery message is received," as claimed in Applicants' claim 3.

Rather, Reynolds merely discloses a system in which a master wireless communication server selects a slave wireless communication server as the wireless communication server with which an access point communicates. More specifically, Reynolds states that "[w]hen an access point is added to the wireless LAN, it sends a request to a master wireless communication server. The master wireless communication server indicates its presence and the application point can request a registration with a

wireless communication server. The master wireless communication server selects a specific wireless communication server to interact with the access point. The access point then tunnels data back and forth between the access point and the selected wireless communication server." (Reynolds, Abstract, Emphasis added). Reynolds is devoid of any teaching or suggestion of selecting, by a wireless access point, an appropriate WAN gateway in an instance where more than one service discovery message is received.

Thus, Reynolds fails to teach or suggest at least the limitation of "selecting, by said wireless access point, an appropriate WAN gateway in an instance where more than one service discovery message is received," as claimed in Applicants' claim 3.

Thus, since each of Matturi, Patel, and Reynolds fails to teach or suggest the limitation of "selecting, by said wireless access point, an appropriate WAN gateway in an instance where more than one service discovery message is received," a combination of Matturi, Patel, and Reynolds (assuming such combination is even possible) also fails to teach or suggest the limitation of "selecting, by said wireless access point, an appropriate WAN gateway in an instance where more than one service discovery message is received," as claimed in Applicants' claim 3.

Moreover, as admitted by the Examiner, both Matturi and Patel fail to teach or suggest an access point registration request comprising a MAC address. In the Office Action, the Examiner takes Official Notice with respect to the MAC address limitation, asserting that "...while the use of a MAC address is not specifically noted, it is well known in the art of wireless networking to utilize a MAC address as a unique identifier." (Office Action, Pg. 4). Applicants respectfully disagree.

MPEP 2144.03 states that "[i]t would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known" and, further, that "[i]f applicant adequately traverses the examiner's assertion of official notice, the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained."

Applicants note that MAC addresses are not necessarily used in all types of wireless networks. For example, MAC addresses typically are not used in cellular networks, such as the network of Matturi. Additionally, it is not clear that MAC

addresses necessarily would be used in the network of Patel. Thus, since MAC addresses are not used in all types of wireless networks, the Examiner's reliance, via Official Notice, on the use of MAC addresses in wireless networks is improper. Accordingly, the Examiner must provide documentary evidence in the next Office action if the rejection is to be maintained.

Additionally, Applicants further note that Matturi and Patel each fail to teach or suggest an access point registration request comprising an IP address or a radio type. As described hereinabove, Matturi merely states that a response message from the base station includes identification information of the base station, failing to teach or suggest any of the specific parameters included in the access point registration request of Applicants' claim 3. Furthermore, Applicants note that the parameters described in Patel (which are listed in Figure 3 of Patel) fail to include IP address or radio type. Applicants respectfully request that the Examiner point out exactly where in Patel there is any teaching or suggestion of an access point registration request including an IP address or a radio type.

Furthermore, Applicants note that Reynolds is devoid of any teaching or suggestion of any such parameters. Rather, Reynolds merely states that the access point sends a registration request to the master wireless communication server. Reynolds is devoid of any teaching or suggestion that a registration request includes registration request information as claimed in Applicants' claim 1. More specifically, Reynolds is devoid of any teaching or suggestion that a registration request includes access point location, IP address, MAC address, radio type, and power level information of a wireless access point, as claimed in Applicants' claim 1.

Thus, a combination of Matturi, Patel, and Reynolds fails to teach or suggest "an access point registration request comprising access point location, IP address, MAC address, radio type, and power level information of said wireless access point," as claimed in Applicants' claim 3.

Thus, for at least these reasons, Matturi, Patel and Reynolds, alone or in combination, fail to teach or suggest Applicants' claim 3, as a whole.

The Office Action failed to establish a *prima facie* case of obviousness, because the combination of Matturi, Patel and Reynolds fails to teach or suggest all the claim elements.

As such, independent claim 3 is patentable over Matturi in view of Patel further in view of Reynolds under 35 U.S.C. 103(a). Furthermore, claims 4-5 depend, directly or indirectly, from independent claim 3, while adding additional elements. Therefore, these dependent claims also are non-obvious and are patentable over Matturi in view of Patel further in view of Reynolds under 35 U.S.C. §103 for at least the same reasons discussed above in regards to independent claim 3.

As such, Applicants' claims 3-5 are patentable over Matturi in view of Patel further in view of Reynolds under 35 U.S.C. §103(a). Therefore, the rejection should be withdrawn.

#### Claims 6-7

Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matturi in view of Patel further in view of Reynolds in further view of Barber. The rejection is traversed.

Each ground of rejection applies only to dependent claims, and each is predicated on the validity of the rejection under 35 U.S.C. 103 given Matturi in view of Patel further in view of Reynolds. Since the rejection under 35 U.S.C. 103 given Matturi in view of Patel further in view of Reynolds has been overcome, as described hereinabove, and there is no argument put forth by the Office Action that Barber supplies that which is missing from Matturi, Patel and Reynolds to render the amended independent claims obvious, these grounds of rejection cannot be maintained.

Therefore, the rejection should be withdrawn.

**Conclusion**

It is respectfully submitted that the Office Action's rejections have been overcome and that this application is now in condition for allowance. Reconsideration and allowance are, therefore, respectfully solicited.

If, however, the Examiner still believes that there are unresolved issues, the Examiner is invited to call Eamon Wall at 732-842-8110 x120 so that arrangements may be made to discuss and resolve any such issues.

Respectfully submitted,

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